AMSAT News Service Weekly Bulletins
Issue: ANS-215
Date: 2014-08-03
Sources: amsat-ans-2014-ans-215-weekly-hyperkitty-a38d1cf4cb.txt

---

AMSAT NEWS SERVICE
ANS-215

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

* July/August 2014 AMSAT Journal is Ready and at the Print Shop
* AMSAT ARRL Centennial Videos Added to www.AMSAT.org
* AMSAT-UK Space Colloquium Videos Now Available
* Enhanced FUNcube-1 Dashboard App now available
* AMSAT Events
* ARISS News
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-215.01
ANS-215 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 215.01
 >From AMSAT HQ KENSINGTON, MD.
DATE August 3, 2014
To All RADIO AMATEURS
BID: $ANS-215.01

July/August 2014 AMSAT Journal is Ready and at the Print Shop

JoAnne, K9JKM reports that the July/August 2014 AMSAT Journal has been sent to the print shop. Look for your copy in your mailbox in a couple of weeks depending on the post office. Thanks to all of our contributors and Editors:
Bernhard, VA6BMJ; Douglas, KA2UPW/5; James, K3JPH for their help getting this issue ready.

In this issue you will find ...

+ AMSAT Announcements: Call for 2014 AMSAT Space Symposium Papers
+ Apogee View by Barry Baines - WD4ASW
+ Fox-1C to Launch on Spaceflight's SHERPA in 3Q 2015
+ Get Ready for Fox-1 Hamfest Handout

+ AMSAT at ARRL Centennial Celebration in Hartford
+ Board of Directors Meeting Minutes and 2014 AMSAT BOD
Election Notice by Alan Biddle - WA4SCA
+ AMSAT at Dayton 2014 by Keith Baker - KB1SF/VA3KSF
+ AMSAT Engineering 2014 - Virtual Teamwork by Jerry Buxton - N0JY
+ AMSAT at Ham-Com 2014
+ New President's Club Donor Drive Announcement
+ Star Comm Group Satellite Operating Awards by Damon Runion - WA4HFN
+ June 19 DNEPR Launch Lofts 37 Satellites
+ AMSAT Field Day 2014 by Bruce Paige - KK5DO
+ UKube-1 With FUNcube-2 Transponder Aboard Launched on July 8
by Graham Shirville - G3VZV

A color preview of the cover page has been posted to the AMSAT North America Facebook page.

The AMSAT Journal welcomes all your input about Amateur Radio in space. We'll do all the final formatting and layout for you. All we need are your article in text, MS-Word, or OpenOffice format. Please send photos separately as JPG or BMP files in as high resolution as possible. We have a writer's guide posted at
http://www.amsat.org/?page_id=1709
-and-feel free to contact the editor directly with your questions. Sample articles from previous issues are posted at:
http://ww2.amsat.org/?page_id=2074

The AMSAT Journal is sent to all members bi-monthly. We report on all aspects of Amateur Radio in space including launches, equipment, operating techniques, antennas, activities, and membership news. Not yet a member? You can find out how to join at:
http://www.amsat.org/?page_id=1095

Please send your articles, photos, and news to journal(a)amsat.org or k9jkm(a)amsat.org.

[ANS thanks the AMSAT Journal Editor Team for the above information]

AMSAT ARRL Centennial Videos Added to www.AMSAT.org

The following are videos of Patrick WD9EWK demonstrating working satellites during the ARRL Centennial. Two of the 3 use audio Patrick recorded, with a slideshow complete with pictures and descriptions of the audio and other stuff related to AMSAT at Hartford.

This is a slideshow from the AO-7 demonstration Patrick gave, after our training seminar wrapped up on the Thursday of that weekend (17 July):
https://www.youtube.com/watch?v=G5TjXbuLv5s

This is a slideshow from the NA1SS contact on Saturday (19 July) morning:
https://www.youtube.com/watch?v=yoFbhPXsUx0

This is an actual video from the AO-7 demonstration at the end of the convention on Saturday (19 July). Thanks Peter W2JV for running the camera for this video!:
https://www.youtube.com/watch?v=BHd91H_t88o

See the AMSAT Presentations at the 2014 ARRL Centennial webpage:
http://www.amsat.org/?page_id=2914

[ANS thanks AMSAT-NA for the above information]

AMSAT-UK Space Colloquium Videos Now Available

Thanks to the hard work of volunteers from the British Amateur Television Club (BATC) videos of the presentations given to the AMSAT-UK International Space Colloquium held in Guildford on July 26-27, 2014 are now available to view online or download to your PC.

Links to the presentation videos, PDF's of the slides and the schedule are at
http://amsat-uk.org/colloquium/colloquium-2014/presentation-videos/

You can also access them by following these steps:
• Go to http://www.batc.tv/
• Click on the 'Film Archive' icon
• Select 'AMSATUK 2014? from the Category drop down menu
• Click on 'Select Category'
• Select the video you wish to watch from the Stream drop down menu
• Click on 'Select Stream'
• Click the play icon '>' on the player
• Clicking on the icon to the left of the player volume control will give you full screen display.
• To download the video file to your PC right-click on the 'Click Here' link under the player.

AMSAT-UK publishes an newsletter, OSCAR News, that is full of Amateur Satellite information. A sample issue of OSCAR News can be downloaded here.
Join AMSAT-UK online at http://tinyurl.com/JoinAMSAT-UK/

[ANS thanks AMSAT-UK the above information]

Enhanced FUNcube-1 Dashboard App now available

AThis weekend saw the AMSAT-UK International Space Colloquium take place and Jim Heck G3WGM and Ciaran Morgan M0XTD together gave a presentation on the FUNcube-1 CubeSat mission.

The presentation included the announcement of a new version of the FUNcube-1 Dashboard. This has greatly improved decoding performance for weak signals – especially for Dongle users. Additionally the Dashboard can now activate the Bias-T pre-amp power from the Dongle.

The new version can now be downloaded and the guidance notes have been updated to provide full information about it.

All users are encouraged to install this new version to improve their system performance and further increase the amount of data

being captured in the Warehouse.

Reports will be very welcome on the FUNcube forum
http://forum.funcube.org.uk/viewtopic.php?f=15&t=195

Dashboard App – Telemetry Decoder
http://funcube.org.uk/working-documents/funcube-telemetry-dashboard/

Data Warehouse – Telemetry Archive
http://warehouse.funcube.org.uk/

[ANS thanks AMSAT-UK for the above information]

AMSAT Events

Iformation about AMSAT activities at other important events around the country. Examples of these events are radio club meetings where AMSAT Area Coordinators give presentations, demonstrations of working amateur satellites, and hamfests with an AMSAT presence (a table with AMSAT literature and merchandise, sometimes also with presentations, forums, and/or demonstrations).

* Saturday, 2 August 2014 – Fairbanks Hamfest in Fairbanks AK
* Friday through Sunday, 12-14 September 2014 – ARRL Southwestern Division Convention 2014 in San Diego CA (near Montgomery Field and I-805/CA-163 interchange)
* Saturday, 8 November 2014 – Tucson Hamfest 2014 in Marana AZ (along I-10 west frontage road, east of exit 236)
* Saturday, 6 December 2014 – Superstition Superfest 2014 in Mesa AZ (Mesa Community College, Dobson Road between Southern Avenue & US-60 exit 177)
* Saturday, 10 January 2015 – Thunderbird Hamfest in Phoenix AZ (43rd Avenue, between Greenway and Bell Roads)
* Friday and Saturday, 20-21 February 2015 – Yuma Hamfest in Yuma AZ (Yuma County Fairgrounds, 32nd Street between Pacific Avenue & Avenue 3E, south of I-8 exit 3)

[ANS thanks AMSAT-NA for the above information]

ARISS News

Upcoming Contacts

* A direct contact via 8J3AK with students at Amino Kita Elementary School, Kyotango, Japan is scheduled for Wed 2014-08-06 10:25:43 UTC 68 deg.

Amino Kita Elementary School was opened on April 1, 1983. Our school is located at the northernmost tip of Kyoto Prefecture in Japan. We have 244 students now, who all study hard and pursue sports actively. Our school is surrounded by a rich, natural environment.

The location of our school is recognized as a part of Quasi-National Park and the National Geo Park. It is also only 100 meters away from the beach. Students in the 6th grade swim one kilometer in the sea every year. During the current season, summer, a lot of lights from squid fishing boats can be seen in the sea at night. Maybe you can see them from the ISS?

Our school has beautiful grounds covered with green grass. At recess, our students play in the grounds full of energy. There are straight hallways more than 100 meters long in our school. They are sometimes used in our arithmetic classes to learn how to measure distance.

The members of our space club will ask you some questions today. These questions were thought of by all of the students. It is a new club that began this year. They are studying the stars and moon, and practicing English hard so that they can make contact with you. All of the people in our school are really looking forward to getting in touch with the astronauts in the ISS.

Latest News

* A telebridge contact with Scouts at Space Jam 8, Rantoul Airport & Chanute Aerospace Museum, Rantoul IL, USA was successfu on Sat 2014-08-02 12:23:19 UTC 60 deg via W6SRJ in Santa Rosa, CA, USA.

ARISS reports
"The contact Space Jam 8 just had a very successful contact with Greg. We had 24 questions answered that were on the list plus 2 extra ones for a total of 26.

I only heard one very very very brief change in signal strength but Greg was rock solid through the entire pass. He actually called W6SRJ first.

The Space Jam 8 group was heading off to their next project of the day, launching a balloon with ham radio on board. They also reported that there was at least 1 TV station there."

SpaceJam 8 provided the following information -
Greetings to all stations from the participants and volunteers of Space Jam 8 in Rantoul, Illinois. Though primarily a weekend Scouting and STEM education event, we are open to all interested youth. Boy Scouts, Girl Scouts and Venturing Crews from 22 states and this year Canada have come together in an educational and fun format to learn more about the life skills that will prepare them for the increasingly complex technological future. While it is well known that Scouting teaches pioneering skills like camping and wilderness survival, the new pioneers and wilderness are in outer space and we are working hard at 44 technology oriented Merit Badges and activities, plus some fun things like the Duct Tape Merit Badge and experiencing 1/3 gravity. Talking to the astronauts on the ISS is an unforgettable part of the experience at Space Jam and that's next on our list. We will not know for many years whether one of these youths becomes an astronaut themselves but it is certain that they are all part of tomorrow's leaders.

Find more information about Space Jam at http://spacejamboree.com/pages/about.

* A telebridge contact with students participating in the ESA 2014 Space Camp, Rossall School, Fleetwood, United Kingdom was successful

Tue 2014-07-29 14:01:13 UTC 53 deg via W6SRJ.

Audio on Echolink and Web stream was transmitted.

This annual camp is organized by the ESA Space Camp Committee takes place in a different European country each summer for 2 weeks. This year the camp takes place between 27 July and 10 August where 185 young space explorers aged 8 to 17 will meet each other in the UK at Rossall School. The children come from the following ESA establishments (UK, France, Spain, Italy, The Netherlands and Germany).

This will be the 20th Space Camp organized by ESA. This year the children will also be involved in celebrating this milestone with marking 50 years of ESA. Children, their parents and educators from the area will join the ESA campers on this special celebration day.

Rossall is a boarding school situated on a beautiful 160-acre site, there is plenty of room for extensive sports and cultural facilities, including a swimming pool, squash and tennis courts, as well as a fitness room and a climbing wall.

The ESC 2014 program will feature a balanced mix of sports such as flag rugby, life-guarding, kayaking and martial arts. The theme for camp will be ‘Reach for the Stars!’ Well-equipped IT labs, classrooms and an on-site planetarium will be instrumental in setting up a space education program that will keep the children motivated with new and exciting hands-on activities and educational tasks involving space-related themes, as well as learning about the culture of the host country.

As with all ESA Space Camps, there will be specific emphasis placed on socialization and respect among the participants. We hope to make the camp a really unique experience for juniors and teenagers who are in the process of becoming citizens of a multicultural society.

* On July 25, 2014, A direct contact via RZ9WWB with students participating in Gagarin From Space at Vii Youth Rally Of Radio Amateurs In Bashkiria, Ufa,Russia was successful 2014-07-25 21:38 UTC.

[ANS thanks ARISS and Charlie, AJ9N for the above information]

Satellite Shorts From All Over

* $248 Billion for Manufacture and Launch of 1,155 Satellites Over Next Decade

According to Euroconsult's newly released research report, Satellites to be Built and Launched, 115 satellites will be launched on average yearly over the next decade (2014-2023).
In comparison with last year's forecast, the number of satellites is stable while market value is growing, thus translating the growing economic importance of the sector, for both governments and commercial satellite companies.

Governments all over the world will be responsible for more than 75%

of the $248 billion in revenues expected from the manufacturing and launch of these 1,155 satellites.
Governments' dominance of the space industry continues to increase as established space countries replace and expand their in-orbit satellite systems and more countries acquire their first operational satellite systems, usually for communications and broadcasting or for Earth observation and imagery intelligence.
Nearly 90% of the government market value will remain concentrated in the 10 countries with an established space industry, but growth in the government market will derive from new satellite systems in 35 nascent space countries, creating a market of $2 billion on average per year to be provided principally by foreign suppliers as local industry capabilities develop simultaneously.

According to Rachel Villain, Principal Advisor at Euroconsult and editor of the report, "governments in established space countries continue to drive innovation for satellite systems with benefits to local industries and the foreign governments to which they export."
In the commercial space sector, Euroconsult anticipates a total of 350 satellites to be launched over the decade, most of which will be for the replacement of capacity existing in-orbit.
These satellites will be equally divided between the geostationary orbit (GEO) and lower altitude orbits (MEO and LEO); 83% of market value remains concentrated in the geostationary orbit, the destination of 300+ satellites operated by 30 commercial companies for communications and broadcasting services.

Still, the constellations to be launched in non-geostationary orbits for communications services and Earth observation imagery should represent a market of $1 billion per year on average over the decade.
Technology advances in satellite payloads and higher competition in launch services allow the continuous improvement of CAPEX efficiency of commercial GEO satellites for communications and broadcasting services.

Electric propulsion will definitively be part of the economic equation, even if only five all-electric commercial satellites are now under construction.

[ANS thanks spacemart.com for the above information]

* US aerospace firm outlines New Zealand-based space program

A United States aerospace company is aiming to make New Zealand one of the exclusive group of countries with a space program by promising a revolutionary new satellite-carrying rocket for a fraction of the current satellite launch costs.

Rocket Lab announced Tuesday that it had developed a light- weight, carbon-composite rocket, named Electron, at its Auckland plant and hoped to offer small satellite launches for less than 5 million U.S. dollars, compared with a current average price of 133 million U.S. dollars.
The company, which has received research and development funding from the government, was being backed by Silicon Valley venture capital firm Khosla Ventures, Rocket Lab founder and New Zealander Peter Beck said in a statement.
The lead-time for businesses to launch a satellite would be cut from years to just weeks and the company already had commercial commitments for 30 launches, said Beck.

At 18 meters in length, 1 meter in diameter and weighing more than 10 tones, Electron would be the first vehicle of its class capable of

delivering payloads up to 100 kg into low Earth orbit at an altitude of about 160 km.

Businesses faced a severe barrier in launching satellites as rockets had remained prohibitively large and expensive, despite the trend for satellites to become smaller, more capable and more affordable, he said.
"Along with benefits for commercial enterprises, cheaper and faster space access has the potential to lead to more accurate weather prediction, global high speed Internet access, as well as real-time monitoring of the impacts of human development," said Beck.
New Zealand was in an ideal launch position for a variety of different types of orbits and plans were underway to build a space port at several potential locations.

Powered by liquid oxygen and kerosene, Electron would have a lift-off mass of 10,500 kg and a possible top speed of 27,500 km per hour.

[ANS thanks space-travel.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Joe Spier, K6WAO
k6wao at amsat dot org